

ABSTRACT OF THE DISCLOSURE

A method of reducing substrate step height. The method includes providing a substrate having a low-voltage device area and high-voltage device area divided by an isolation structure, forming an oxidation mask at least approximately 500Å thick over the low-voltage device area and parts of the isolation structure, forming a first oxide layer on the exposed high-voltage device area and isolation structure using the oxidation mask as a mask, removing the oxidation mask, and forming a second oxide layer, thinner than the first oxide layer, on the low-voltage device layer.